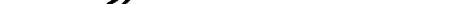




Substitute for form 1449A/P INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	10/086,043
				Filing Date	February 28, 2002
				First Named Inventor	S. Mark Haugland
				Group Art Unit	2858
				Examiner Name	
Sheet	1	of	1	Attorney Docket Number	H052722.0029US0

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS		
Exr Initials	Include Name of first Author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), volume-issue number(s), page(s), date (in parentheses). If a book, also include publisher and city and/or county where published.	T,
CQ	<i>New Discovery with Important Implications for LWD Propagation Resistivity Processing and Interpretation</i> , S. Mark Haugland, SPWLA 42 nd Annual Logging Symposium, Powerpoint, pp. 1-38 (June 17-20, 2001)	

Examiner Signature		Date Considered	9/6/05
--------------------	---	-----------------	--------

<p>Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)</p>			Complete if Known		
			Application Number		
			Filing Date		
			First Named Inventor		S. Mark Haugland
			Group Art Unit		
			Examiner Name		
Sheet	1	of	2	Attorney Docket Number	H052722.0029US

JC971 U.S. PTO
10/08/04
02/28/02

U.S. PATENT DOCUMENTS				
Exr Initials	U.S. Patent Document		Name of Inventor or Applicant of Cited Document	Date of Publication of Cited Document MM-YYYY
	Number	Kind Code (if known)		
CR	3,944,910		Rau	03-1976
CL	4,185,238		Huchital et al.	01-1980
CR	4,209,247		Urano et al.	06-1980
CR	4,209,747		Huchital	06-1980
CL	4,899,112		Clark et al.	02-1990
CL	4,968,940		Clark et al	11-1990
CL	5,157,605		Chandler et al	10-1992
CL	5,594,343		Clark et al.	01-1997
CR	5,869,968		Brooks et al.	02-1999
CL	5,881,973		Agajanian et al.	03-1999
CR	6,060,884		Meyer, Jr. et al.	05-2000

FOREIGN PATENT DOCUMENTS				
Exr Initials	Foreign Patent Document			Date of Publication of Cited Document MM-YYYY
	Country Code	Number	Kind Code (if known)	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS		
Exr Initials	Include Name of first Author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), volume-issue number(s), page(s), date (in parentheses). If a book, also include publisher and city and/or country where published.	T ₁
CR	<i>Dielectric-Independent 2-MH, Propagation Resistivities</i> , Peter T. Wu, John R. Lovell, Brian Clark, Stephan D. Bonner and Jacques R. Tabanou, Society of Petroleum Engineers, Inc. SPE 56448, 19 pages (© 1999)	
CL	<i>New Developments In 2-MH, Electromagnetic Wave Resistivity Measurements</i> , S. Gianzero, G. A. Merchant, M. Haugland and R. Strickland, SPWLA 35 th Annual Logging Symposium, pp. 1-25 (June 19-22, 1994)	
CR	<i>Vertical Deconvolution of 2 MH, Propagation Tools</i> , Richard Rosthal, David Allen and Stephen Bonner, SPWLA 34th Annual Logging Symposium, (June 13-16, 1993)	
CL	<i>Geometric Factor and Adaptive Deconvolution of MWD-PWR Tools</i> , Q. Zhou, D. J. Hilliker and D. Norwood, The Log Analyst, pp. 390-398 (July-August, 1992)	
CR	<i>Reconciling Differences in Depth of Investigation Between 2-MH, Phase Shift and Attenuation Resistivity Measurements</i> , Tarek Habashy and Barbara Anderson, SPWLA 32 nd Annual Logging Symposium, pp. 1-20 (June 16-19, 1991)	
CL	<i>Complex Variables and Applications</i> 5 th Ed., Ruel V. Churchill and James Ward Brown, 2 cover pages and pp. 48-50 (©1990)	
CL	<i>Waves and Fields In Inhomogeneous Media</i> , Transients, Weng Cho Chew, 2 cover pages, pp. 244-246, 360-365 and 485-487 (©1990)	

Carlos R. Olts Rodriguez 9/6/05

Substitute for form 1449A/PTO				<i>Complete Known</i>	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	
				Filing Date	
				First Named Inventor	S. Mark Haugland
				Group Art Unit	
Examiner Name					
Sheet	2	of	2	Attorney Docket Number	H052722.0029US

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Exr Initials	Include Name of first Author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), volume-issue number(s), page(s), date (in parentheses). If a book, also include publisher and city and/or country where published.				T ₁
CR	<i>Algorithm 624: Triangulation and Interpolation at Arbitrarily Distributed Points In the Plane</i> , Robert J. Renka, ACM Transactions On Mathematical Software, Vol. 10, pp. 440-442 (December 4, 1984)				
CR	<i>A Triangle-Based C¹ Interpolation Method</i> , R. J. Renka and A. K. Cline, Rocky Mountain Journal of Mathematics, Vol. 14, No. 1, pp. 223-237 (Winter 1984)				
CR	<i>More On the Laterlog Device</i> , J. H. Moran and R. E. Chemali, Geophysical Prospecting 27, pp. 902-930 (1979)				
CR	<i>Geophysics, A Journal of General and Applied Geophysics</i> , Published by The Society of Exploration Geophysicists, Vol. XXVII, No. 6, Part 1, cover page and pp. 828-858 (December 1962)				
CR	<i>Effect of Tool Eccentricity on Some Electrical Well-Logging Tools</i> , John R. Lovell and Weng Cho Chew, IEEE Transactions on Geoscience and Remote Sensing, Vol. 28, No. 1, pp. 127-136 (January 1990)				
CR	<i>BADEA, EUGENE A. AND EVERETT, MARK E., 3-D Finite Element Analysis of Induction Logging</i> , 4 pages (date unknown)				
CR	<i>Fundamental Analysis of Remote-Field Eddy-Current Effect</i> , IEEE Transactions on Magnetics, Vol. 32, No. 4, pp. 3195-3211 (July 1996)				
CR	<i>Numerical Recipes</i> , The Art of Scientific Computing, ©Cambridge Press 1986 and © Numerical Recipes Software, 2 cover pages, pp. 52-65 and 520-527 (1986)				
CR	<i>NAG Fortran Library Manual Mark 18</i> , ©The Numerical Algorithms Group Limited, Vol. 4, D04-4E04L cover pages and pp. E04.1-E04.16 and 1-6 (September 1997)				
CR	<i>New Discovery with Important Implications for LWD Propagation Resistivity Processing and Interpretation</i> , S. Mark Haugland, SPWLA 42 nd Annual Logging Symposium, pp. 1-14 (June 17-20, 2001)				

Examiner Signature	<i>S. Mark Haugland</i>	Date Considered	9/6/05
--------------------	-------------------------	-----------------	--------

Substitute for form 1449A/PTO		Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/086,043
		Filing Date	February 28, 2002
		First Named Inventor	S. Mark Haugland
		Group Art Unit	2858
		Examiner Name	
Sheet	1	of	1
		Attorney Docket Number	H052722.0029US0

O I P E
JAN 30 2003
PATENTS & TRADEMARKS

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS		
Exr Initials	Include Name of first Author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), volume-issue number(s), page(s), date (in parentheses). If a book, also include publisher and city and/or country where published.	T ₁

Examiner Signature	<i>Calo P. Ots Rodriguez</i>	Date Considered	9/6/05
-----------------------	------------------------------	--------------------	--------

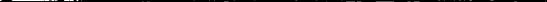
Substitute for form 1449A/PTO		<i>Complete if Known</i>	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	10/086,043
		Filing Date	February 28, 2002
		First Name of Inventor	S. Mark Haugland
		Group Art Unit	2858
		Examiner Name	
Sheet	1	of	1
		Attorney Docket Number	H052722.0029US0

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS		
Exr Initials	Include Name of first Author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), volume-issue number(s), page(s), date (in parentheses). If a book, also include publisher and city and/or country where published.	T ₁
CJ	<i>New Discovery with Important Implications for LWD Propagation Resistivity Processing and Interpretation</i> , S. Mark Haugland, SPWLA 42 nd Annual Logging Symposium, Powerpoint, pp. 1-38 (June 17-20, 2001)	

Examiner Signature	<i>Lola R. Olt Rodrigz</i>	Date Considered	9/6/05
--------------------	----------------------------	-----------------	--------

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known
				Now
				Application Number 10/086,043
				Filing Date February 28, 2002
				First Named Inventor S. Mark Haugland
				Group Art Unit 2858
				Examiner Name
Sheet	1	of	1	Attorney Docket Number H600131.0008US0

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS		
Exr Initials	Include Name of first Author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), volume-issue number(s), page(s), date (in parentheses). If a book, also include publisher and city and/or county where published.	T ₁
<u>CR</u>	Search Report under Section 17, 1 page, (10/10/2003)	

Examiner Signature		Date Considered	9/6/05
--------------------	---	-----------------	--------

10086043

Substitute for form 1449A/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				RECEIVED	
(use as many sheets as necessary)				FEB 11 2004	
Sheet	1	of	2	Attorney Docket Number	H052722.0029US Technology Center 2100

U.S. PATENT DOCUMENTS					
Exr Initials	U.S. Patent Document		Name of Inventor or Applicant of Cited Document		Date of Publication of Cited Document MM-YYYY
	Number	Kind Code (if known)			
CL	3,944,910		Rau		03-1976
CL	4,185,238		Huchital et al.		01-1980
CL	4,209,247		Urano et al.		06-1980
CL	4,209,747		Huchital		06-1980
CR	4,899,112		Clark et al.		02-1990
CL	4,968,940		Clark et al		11-1990
CL	5,157,605		Chandler et al		10-1992
CR	5,594,343		Clark et al.		01-1997
CL	5,869,968		Brooks et al.		02-1999
CL	5,881,973		Agajanian et al.		03-1999
CL	6,060,884		Meyer, Jr. et al.		05-2000

FOREIGN PATENT DOCUMENTS					
Exr Initials	Foreign Patent Document			Name of Inventor or Applicant of Cited Document	Date of Publication of Cited Document MM-YYYY
	Country Code	Number	Kind Code (if known)		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS						T ₁
Exr Initials	Include Name of first Author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), volume-issue number(s), page(s), date (in parentheses). If a book, also include publisher and city and/or county where published.					
CR	<i>Dielectric-Independent 2-MHz Propagation Resistivities</i> , Peter T. Wu, John R. Lovell, Brian Clark, Stephan D. Bonner and Jacques R. Tabanou, Society of Petroleum Engineers, Inc. SPE 56448, 19 pages (© 1999)					
CR	<i>New Developments In 2-MHz Electromagnetic Wave Resistivity Measurements</i> , S. Gianzero, G. A. Merchant, M. Haugland and R. Strickland, SPWLA 35 th Annual Logging Symposium, pp. 1-25 (June 19-22, 1994)					
CL	<i>Vertical Deconvolution of 2 MHz Propagation Tools</i> , Richard Rosthal, David Allen and Stephen Bonner, SPWLA 34th Annual Logging Symposium, (June 13-16, 1993)					
CR	<i>Geometric Factor and Adaptive Deconvolution of MWD-PWR Tools</i> , Q. Zhou, D. J. Hilliker and D. Norwood, <i>The Log Analyst</i> , pp. 390-398 (July-August, 1992)					
CR	<i>Reconciling Differences in Depth of Investigation Between 2-MHz Phase Shift and Attenuation Resistivity Measurements</i> , Tarek Habashy and Barbara Anderson, SPWLA 32 nd Annual Logging Symposium, pp. 1-20 (June 16-19, 1991)					
CL	<i>Complex Variables and Applications</i> 5 th Ed., Ruel V. Churchill and James Ward Brown, 2 cover pages and pp. 48-50 (©1990)					
CR	<i>Waves and Fields In Inhomogeneous Media</i> , Transients, Weng Cho Chew, 2 cover pages, pp. 244-246, 360-365 and 485-487 (©1990)					

Cesar P. Oots Rodriguez 9/6/05

10086043

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Complete if Known	
				Application Number	
				Filing Date	
				First Named Inventor	S. Mark Haugland
				Group Art Unit	
				Examiner Name	
Sheet	2	of	2	Attorney Docket Number	H052722.0029US

RECEIVED

FEB 11 2004

Technology Center 2100

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS		
Exr Initials	Include Name of first Author (in CAPITAL LETTERS), title of the article (where appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), volume-issue number(s), page(s), date (in parentheses). If a book, also include publisher and city and/or country where published.	T,
CR	<i>Algorithm 624: Triangulation and Interpolation at Arbitrarily Distributed Points In the Plane</i> , Robert J. Renka, ACM Transactions On Mathematical Software, Vol. 10, pp. 440-442 (December 4, 1984)	
CR	<i>A Triangle-Based C' Interpolation Method</i> , R. J. Renka and A. K. Cline, Rocky Mountain Journal of Mathematics, Vol. 14, No. 1, pp. 223-237 (Winter 1984)	
CR	<i>More On the Laterlog Device</i> , J. H. Moran and R. E. Chemali, Geophysical Prospecting 27, pp. 902-930 (1979)	
CR	<i>Geophysics, A Journal of General and Applied Geophysics</i> , Published by The Society of Exploration Geophysicists, Vol. XXVII, No. 6, Part 1, cover page and pp. 828-858 (December 1962)	
CR	<i>Effect of Tool Eccentricity on Some Electrical Well-Logging Tools</i> , John R. Lovell and Weng Cho Chew, IEEE Transactions on Geoscience and Remote Sensing, Vol. 28, No. 1, pp. 127-136 (January 1990)	
CR	BADEA, EUGENE A. AND EVERETT, MARK E., <i>3-D Finite Element Analysis of Induction Logging</i> , 4 pages (date unknown)	
CR	<i>Fundamental Analysis of Remote-Field Eddy-Current Effect</i> , IEEE Transactions on Magnetics, Vol. 32, No. 4, pp. 3195-3211 (July 1996)	
CR	<i>Numerical Recipes</i> , The Art of Scientific Computing, ©Cambridge Press 1986 and © Numerical Recipes Software, 2 cover pages, pp. 52-65 and 520-527 (1986)	
CR	<i>NAG Fortran Library Manual Mark 18</i> , ©The Numerical Algorithms Group Limited, Vol. 4, D04-4E04L cover pages and pp. E04.1-E04.16 and 1-6 (September 1997)	
CR	<i>New Discovery with Important Implications for LWD Propagation Resistivity Processing and Interpretation</i> , S. Mark Haugland, SPWLA 42 nd Annual Logging Symposium, pp. 1-14 (June 17-20, 2001)	

Examiner Signature		Date Considered	9/6/05
--------------------	---	-----------------	--------